



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/019,614	02/06/98	KOSKI	A 460-007777-U

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PERMAN AND GREEN
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LM02/0623

EXAMINER

LEE, P

ART UNIT

PAPER NUMBER

2747

DATE MAILED:

06/23/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/019,614

Applicant(s)

Koski et al

Examiner

Ping Lee

Group Art Unit

2747



☒ Responsive to communication(s) filed on Apr 4, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-28 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-28 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2747

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hallikainen et al (WO 95/19096).

Regarding claims 1-3, and 5, Hallikaian shows the method for setting audio parameters (the audio data traveled through AUDIO line in Figs. 3 and 4) in a DSP (DSP) in an electronic device (cellular phone) comprising at least one auxiliary connection (mobile phone interface) for connecting at least one auxiliary device (AUXILIARY DEVICE 1..N shown in Fig. 1) wherein the parameters (traveled AUDIO line in Figs. 3 and 4) are loaded to DSP during operation of the electronic device from the auxiliary device.

Regarding claims 4 and 6, Hallikaian shows the detection line ("hook-line"; column 2, lines 52-53) and a connection bus ("interrupt line"; column 3, lines 7-8; or "digital serial bus", column 3, lines 25-26) and means for detecting the connection of the auxiliary device (column 2, line 57+).

Art Unit: 2747

Regarding claims 7 and 8, Hallikaian shows the transmitter/receiver unit (RF unit) of a mobile station.

Regarding claim 9, although not explicitly shown, a loudspeaker and a microphone are inherently included in the hand-free unit.

Regarding claims 10-13, the audio data on the AUDIO line in Figs. 3 and 4 includes data other than data used to recognize the type of auxiliary device.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2747

4. Claims 14-17, 23, 24, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallikainen et al.

Regarding claims 14, 16, 23 and 24, Hallikaian shows the method for setting audio parameters (amplification factors) in a DSP (DSP) in an electronic device (cellular phone) comprising at least one auxiliary connection (any element proceeding DSP) for connecting at least one auxiliary device (AUXILIARY DEVICE) wherein the parameters are loaded to DSP during operation from a memory. However, Hallikainen fails to show the memory is a writable mass storage, and especially a FLASH memory as specified in claim 27.

It was well known in the art that a writable memory offers the advantage of being adjustable, i.e. new data can be stored. A FLASH memory is a type of non-volatile memory in which the data will not be erased even without the power. Thus, it would have been obvious to one of ordinary skill in the art to modify Hallikainen to use a FLASH memory to store the amplification data in order to be able to change the stored amplification data when new auxiliary device is introduced and keep the data stored in the memory even without the power.

Regarding claim 15, audio parameters (transmitted through AUDIO line in Figs. 3 and 4) are loaded from the auxiliary device Via the auxiliary device connection (interface).

Regarding claims 17, Hallikaian shows the detection line ("hook-line"; column 2, lines 52-53) and a connection bus ("interrupt line"; column 3, lines 7-8; or "digital serial bus", column 3, lines 25-26) and means for detecting the connection of the auxiliary device (column 2, line 57+).

Art Unit: 2747

5. Claims 18-22, 25, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallikainen et al as applied to claims 14-17 above, and further in view of Malvino et al (Digital Principles and Applications).

Regarding claims 18-22, 25, and 26, Hallikainen shows the DSP, the means for storing audio parameters (memory shown in Fig. 1), and an auxiliary device connection (interface), but fails to show the means for loading the audio parameters into the memory from a writable mass storage. That is, what Hallikainen is missing is the common practice of how to write the data into the memory during manufacturing process of assembling the mobile phone. Hallikainen teaches a mobile telephone containing a memory for storing the amplification data. One skilled in the art would have expected that the amplification data has to be wrote into the memory during the manufacturing process. It was also well known in the art on how to address the cell in the memory in order to store the data into the cell from a mass storage. Malvino taught such well known technique. Whether the mass storage is a writable mass storage, especially a FLASH memory as specified in claim 28 is determined by the engineer depending on whether the data will be changed (which is mostly possible since the new auxiliary device may be on the market), and whether the data should be kept even without the power. Thus, it would have been obvious to one of ordinary skill in the art to utilize the write operation as taught in Malvino to load the data into the memory in Hallikainen and to use a FLASH memory as the mass storage to store the amplification data in order to be able to change the stored amplification data when new auxiliary device is introduced and keep the data stored in the FLASH memory even without the power.

Art Unit: 2747

Response to Arguments

6. Applicant's arguments filed 4/4/00 have been fully considered but they are not persuasive.

Applicant argued on pps. 6-8 that Hallikainen fails to load the audio parameters from outside.

As shown in Figs. 3 and 4 of Hallikainen, the AUDIO line does load audio data, other than the one identify the type of auxiliary device, from the outside to DSP.

7. Applicant's arguments with respect to claims 14-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2747

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. **Any response to this final action should be mailed to:**

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

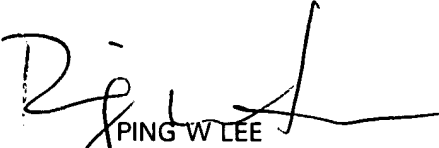
or faxed to:

(703) 308-6306 or 308-6296,

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping W. Lee whose telephone number is (703) 305-4865.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.


PING W LEE
PRIMARY EXAMINER
GROUP 2700

pwl
June 9, 2000